



*From “Wetland Program Development Grants (WPDGs) Case Studies”  
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**New Jersey Department of Environmental Protection (NJ DEP):** *Increasing New Jersey’s ability to monitor wetland acreage gains and losses by developing a more efficient compensatory mitigation program*

**Introduction**

New Jersey’s State Legislature has taken numerous steps to protect wetlands through the regulation of nearly all activity within and adjacent to freshwater wetlands. In 1994, New Jersey assumed Clean Water Act Section 404 authority from the U.S. Army Corps of Engineers through implementation of the freshwater wetlands protection program. Jurisdiction over freshwater wetlands, upland buffers and transition areas is authorized by New Jersey’s Freshwater Wetlands Protection Act (1987), while The New Jersey Wetlands Act of 1970 regulates activities on mapped coastal wetlands. New Jersey Department of Environmental Protection (NJ DEP) has primary oversight of the state’s wetland regulatory program. The Division of Land Use Regulation oversees freshwater wetlands, stream encroachment, coastal permitting and tidelands. The Division also reviews and oversees applications for permits to build or develop within these lands.

A NJ DEP aerial-photo based data set showing changes in land use between 1986 and 1995 revealed that New Jersey lost nearly 16,000 acres of wetlands during that period. Since 1995, EPA and states have been implementing the National Environmental Performance Partnership System, a performance-based system aimed at coordinating protection efforts to maximize efficiency in achieving environmental goals. NJ DEP has been an active participant in this program from the onset and through the NEPPS process, established a goal to achieve a net increase of wetland acreage in New Jersey. An important aspect in realizing that goal is the need to measure the loss of wetlands through the permit programs and determine if those losses are offset through compensatory mitigation.

**WPDG Activity**

Uncertainty about the status of mitigation projects throughout the state prompted an investigative report in March 2002. NJ DEP Division of Science, Research, & Technology funded a study, entitled “Creating Indicators of Wetlands Status, Freshwater Wetland Mitigation in New Jersey”, to assess the impact of wetland mitigation in the state and identify potential causes for insufficient compensation of wetland losses. The study identified the lack of consistent tracking methods, among other things, as a primary contributor to the failing mitigation program.

Based on results from the above study, the Land Use Regulation Program (LURP) of NJ DEP used a WPDG in 2002 to revise the mitigation database. This project allowed NJ DEP to quantify compliance with the NEPPS goal of a net increase in wetland acreage in New Jersey. Primary objectives of the project were to:

1. Update the revised Wetland Mitigation database system to accommodate the addition of new data fields and incorporate GIS and GPS information into the database;
2. Field-test monitoring methods identified within the “Creating Indicators of Wetlands Status, Freshwater Wetland Mitigation in New Jersey” and develop a standard monitoring protocol;
3. Train LURP staff to perform Comprehensive/Disturbed Area wetland identification and delineation methods, outlined in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands, and to perform functional assessments and permit concurrence evaluations using techniques developed in the Indicator Study; and
4. Monitor constructed wetland mitigation sites using the new method, conduct site inspections and provide accurate figures on net wetland loss.

The comprehensive tracking system allows NJ DEP to monitor compliance with compensatory mitigation special permit conditions and quantify permitted wetland impacts. The training provided to LURP staff helps increase expertise in identifying patterns in failed and successful mitigation projects as well as boost efficiency in managing other mitigation-related issues. The successful development and use of this mitigation tracking database may provide a model for other wetland protection programs nationwide.

#### **Current Work and Future Plans**

NJ DEP, primarily LURP, continues to update and populate the database developed in the initial project and plans to use it to generate reports automatically to ensure timely and efficient tracking of projects. In addition, the database allows for better tracking of compliance with permit requirements, deadlines, financial surety compliance and deed restrictions. This database will allow LURP to maintain a higher level of scrutiny of each mitigation project thereby reducing the chance of a failing project and increasing the success rate of the State’s mitigation sites. The Land Use Regulation division also plans to modify the evaluation methods developed in the “Creating Indicators of Wetlands Status, Freshwater Wetland Mitigation in New Jersey” for greater efficiency.

Please visit the Division of Land Use Regulation, Freshwater Wetland website (<http://www.state.nj.us/dep/landuse/fwfw.html>) to learn more about how NJ DEP is coordinating the protection of these valuable resources.

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